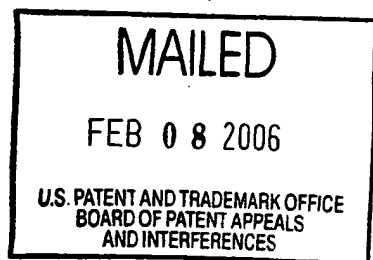


The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES



Ex parte YOSHIKAZU KURITA
and
AKIRA SUZUKI

Appeal No. 2006-0554
Application 10/065,541

ON BRIEF

Before THOMAS, JERRY SMITH, and DIXON, Administrative Patent Judges.

THOMAS, Administrative Patent Judge.

DECISION ON APPEAL

Appellants have appealed to the Board claims 1 through 4, 6, 9, 11, 23 and 25, these claims having been twice rejected.

Independent claim 1 is reproduced below:

1. An electrically operated starter for an internal combustion engine, said starter comprising a DC electrical motor having an output shaft in starting arrangement with a shaft of the engine for starting the engine upon the application of electrical power, said motor being comprised of cooperating,

relatively rotatable permanent magnet and selectively energized coil winding elements, said permanent magnet element being comprised of circumferentially spaced permanent magnets of opposite polarity, said coil winding element comprised of circumferentially spaced magnetic pole cores around which electrical coils are wound, said cores having ends in facing relation to said permanent magnets, said motor having reduced vibration after the discontinuation of application of electrical power to said coil winding elements upon engine starting by at least one of reducing the cogging torque of the starter motor and rigidifying the outer housing of the starter motor.

The following references are relied on by the examiner:

| | | |
|---|-----------|---------------|
| Shiga et al. (Shiga) | 5,475,276 | Dec. 12, 1995 |
| Nakano | 5,942,873 | Aug. 24, 1999 |
| Nishikawa et al. (Nishikawa) ¹ | 6,252,323 | June 26, 2001 |

Claims 23 and 25 stand rejected under 35 U.S.C.

§ 102(a) as being anticipated by Nishikawa. Claims 1 through 4 and 6 stand rejected under 35 U.S.C. § 103. As evidence of obviousness, the examiner relies upon Shiga in view of Nakano. This rejection is extended under 35 U.S.C. § 103 to dependent claims 9 and 11 by the additional reliance upon Nishikawa.

Rather than repeat the positions of the appellants and the examiner, reference is made to the Substitute Brief (no Reply

¹ Page 3 of the Answer inadvertently and incorrectly lists the wrong patent number for the Nishikawa patent. Page 3 of the Brief correctly lists that number of this reference.

Brief has been filed) for the appellants' positions, and to the Answer for the examiner's positions.

OPINION

We sustain the various rejections of the claims on appeal under 35 U.S.C. § 102 and 35 U.S.C. § 103 essentially for the reasons set forth by the examiner in the Answer, as amplified here.

At the outset, we note that the McGraw-Hill Dictionary of Scientific and Technical Terms, Fifth Edition, 1994, at page 400, states that cogging is "[v]ariations in torque and speed of an electric motor due to variations in magnetic flux as rotor poles move past stator poles." This appears to be essentially what the admitted prior art at Specification, pages 1 and 2, indicates anyway. What is significant about appellants' own prior art assessment is that it was known that abnormal and unpleasant noises exist after the power to a starter motor of a vehicle is turned off, that is, after the engine to which the starter motor is attached begins to operate on its own. Thus, appellants' continued arguments as to each of the rejections that the applied prior art does not specifically teach

applying the respective solutions to known cogging problems after the engine is started is misplaced. Even the dictionary definition noted earlier appears to state to the artisan that it is known that cogging problems exist as long as there is a relative rotational movement between rotor poles and stator poles in an electric motor.

In assessing appellants' arguments as to all rejections, we note two major themes. The first is that because the purpose of the claimed device is different than the purpose apparent to appellants of the applied prior art, patentability obtains. The second is that the use of a device has patentable significance over the applied prior art. We note here as well that appellants have presented no arguments before us against the examiner's position of inherency.

To the extent appellants argue that the purposes of the references relied upon by the examiner are different from the appellant's disclosed purpose, this is not pertinent to the issue and is essentially irrelevant if the prior art teachings would have led the artisan to construct an arrangement having the claimed structural features. In re Heck, 699 F.2d 1331, 216 USPQ 1038 (Fed. Cir. 1983) and In re Kronig, 539 F.2d 1300, 190 USPQ

425 (CCPA 1976). In re Heck also indicates that the use of patents as references is not limited to what the patentees described as their own invention. The law of obviousness does not require that references be combined for reasons contemplated by an inventor, but only looks to whether the motivation or suggestion to combine references is provided by prior art taken as a whole. In re Beattie, 974 F.2d 1309, 24 USPQ2d 1040 (Fed. Cir. 1992). In an obviousness determination, the prior art need not suggest solving the same problem set forth by appellants. In re Dillon, 919 F.2d 688, 692-93, 16 USPQ2d 1897, 1901 (Fed. Cir. 1990) (en banc) (overruling in part In re Wright, 848 F.3d 1216, 1220, 6 USPQ2d 1959, 1962 (Fed. Cir. 1988)), cert. denied, 500 U.S. 904 (1991).

A different intended use of the same structure as in the prior art does not prohibit a statutory anticipation rejection, for example. Indeed, it has been stated by our reviewing court that "the absence of a disclosure relating to function does not defeat the Board's finding of anticipation. It is well settled that the recitation of a new intended use for an old product does not make a claim to that old product patentable" (case citations omitted). In re Schrieber, 128 F.3d 1473, 1477,

44 USPQ2d 1429, 1431 (Fed. Cir. 1997). The court concludes at 128 F.3d 1477, 44 USPQ2d 1431-32, that "Schrieber's contention that his structure will be used to dispense popcorn does not have patentable weight if the structure is already known, regardless of whether it has ever been used in any way in connection with popcorn" (emphasis added). Such reasoning obviously applies to rejections under 35 U.S.C. § 103. Schrieber confirms the guidance provided in Ex parte Masham, 2 USPQ2d 1647 (Bd. Pat. App. & Int. 1987), that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus for a prior art apparatus satisfying the claimed structural limitations. Note also Ex parte Wikdahl, 10 USPQ2d 1546, 1548 (Bd. Pat. App. & Int. 1989) and In re Casey, 370 F.2d 576, 580, 152 USPQ 235, 238, CCPA 1967).

In view of the foregoing remarks, we turn first to the rejection of independent claim 23, where its dependent claim 25 is not specifically argued. Appellants' remarks at pages 3 and 4 of the Brief initially admit that Nishikawa teaches reducing cogging torque during electrical power operation to the extent this feature is recited in claim 23 on appeal. On the other

hand, appellants urge that there is no teaching that cogging torque is reduced after electrical power ceases to be applied. Our earlier remarks directly address the additional remarks with regard to a different purpose or use of a device anyway, notwithstanding appellants' admission at the top of page 4 of the Brief that the same structure as claimed is taught in Nishikawa. In this respect, note the showings in figures 3 and 4 as to the first embodiment of this reference, the showing in figure 9 in the third embodiment relied upon by the examiner, and a corresponding showing in figure 11 in the fourth embodiment. The artisan would well appreciate that the decrease in cogging torque taught in Nishikawa applies whether the power is applied or not to the respective motor since cogging problems exist by definition because of variations in magnetic flux as the rotor poles move past stator poles as discussed earlier.

Turning next to the rejection of the claims depending from independent claim 1 under 35 U.S.C. § 103, the end of independent claim 1 requires reduced vibration after discontinuation of the applied electrical power is achieved "by at least one of reducing the cogging torque of the starter motor and rigidifying the outer housing of the starter motor."

Because of this alternative approach, the examiner's analysis clearly indicates that as to Shiga alone, this reference teaches one of the alternative features at the end of claim 1 on appeal. Known problems according to the prior art in figures 5 and 6 of Shiga relative to vibrating conditions being excessive is noted by the examiner at the top of column 2 as being solved by rigidifying the outer housing arrangement. This approach is further exemplified according to the outer housing designed in Shiga's first embodiment of figure 1 and second embodiment in figure 3 where the tubular yoke/outer housing has been rigidified by the concave portions 4 in addition to the longitudinal through bolts 3 as applied to the vehicle starter motor 100 in figure 4.

As further applied to claim 1, this claim only requires the reduced vibration after discontinuation of electrical power by rigidifying the outer housing of the motor. This alternative requirement is met by Shiga simply because there is no requirement that cogging torque itself be reduced according to the alternative language at the end of claim 1 on appeal. The artisan would readily recognize that the more rigid housing of the starter motor does not lose its rigidity when electric power is not applied to the starter motor itself.

When the additional teachings of Nakano are applied as argued by the examiner, the alternative requirement of reducing the cogging torque of the starter motor is clearly met as well because Nakano further reduces known vibration problems, such as those caused by cogging as illustrated in the prior art at column 1 of Nakano, by inclining or otherwise skewing the boundary lines between the adjacent permanent magnets as illustrated in figures 4B and 4C. Thus, the features of dependent claims 2 and 3 as well as claim 4 are clearly taught by the obvious combination. The examiner addresses appellants' arguments as to claim 6 at page 8 of the Answer.

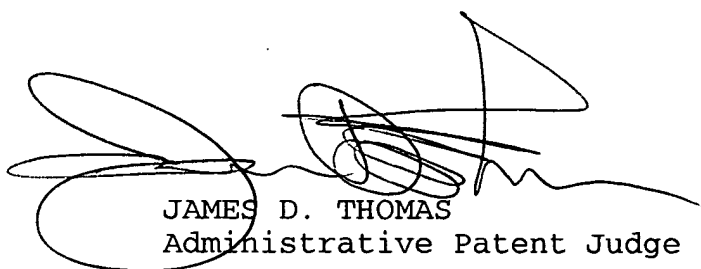
Lastly, as to the separate rejection of dependent claims 9 and 11 as being obvious over Shiga in view of Nakano, further in view of Nishikawa, appellants only argue the difference in problems of the applied prior art versus the problems addressed by appellants, an overriding theme throughout the Brief, which we have addressed earlier in this opinion.

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In view of the foregoing, the decision of the examiner
rejecting various claims under 35 U.S.C. § 102 and 35 U.S.C.
§ 103 is affirmed.

No time period for taking any subsequent action in con-
nection with this appeal may be extended under 37 CFR § 1.136(a).


AFFIRMED



JAMES D. THOMAS
Administrative Patent Judge



JERRY SMITH
Administrative Patent Judge



JOSEPH L. DIXON
Administrative Patent Judge

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Appeal No. 2006-0554
Application 10/065,541

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